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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/511,737 02/24/00 YELLIN

D 162/01224

EXAMINER

TM02/0807

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MAIL

ART UNIT

PAPER NUMBER

2121

DATE MAILED:

08/07/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/511,737

Applicant(s)

Examiner

Mai T

Group Art Unit

2121

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 6-18-01
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-40 is/are pending in the application.
- Of the above claim(s) 33-40 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-32 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 2
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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1. Applicant's election with traverse of Group I in Paper No. 4 is acknowledged. The traversal is on the ground(s) that "as stated by the examiner, the claims of Group I and II are classified in the same class and subclass. In addition, all the claims relate to timing issues of wave digital filters. In the claims of group I the timing issues are addressed by the term 'delaying the propagation of a value', while in group II the timing issues are related to as 'initial calculation of one or more output values of a first group of less than all the adapters of the filter, responsive to the provided clock signal'" (emphasis added). This is not found persuasive because Group I (Claims 1-32) is directed to a wave digital filter having "memoryless adapters" and "delaying the propagation of a value." The "delaying the propagation of a value into at least one input of at least one of adapters" means the adapters are cascaded. Group II (Claims 33-40) is directed to a wave digital filter having "initial calculation of one or more output values of a first group of less than all the adapters of the filter, responsive to the provided clock signal" which means the adapters are parallel. Therefore, they are disclosed as different combinations which are not connected in design, operation or effect from each other, and thus are clearly directed to different and independent inventions.

The requirement is still deemed proper and is therefore made FINAL.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Fettweis (Applicant's admission Prior Art) or Schwartz in view of Nicol.

Fettweis (e.g., see Fig. 1 and Tables 6, 8 & 10) and Schwartz (e.g., see Figs. 1a-1c, 2, 4, 6 & 8) disclose all the claimed invention except the "at least one controlled gate which delays the propagation of value into at least one input of at least one of the adapters"; however, the feature is old and well known in the art. For example, Nicol discloses, e.g., see Fig. 2, a circuit having controlled gates which delay the propagation of signals to other elements for reducing power consumption. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Nicol feature in either Fettweis or Schwartz, thereby making the claimed invention, because the proposed device is a wave digital filter having controlled gates which delay the propagation of signals to other elements as claimed.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (703) 305-9761. The examiner can normally be reached on Tue-Fri from 6:30am to 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Grant, can be reached on (703) 308-1108. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-5404.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

TM



TAN V. MAI
PRIMARY EXAMINER